

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

LUCENT TECHNOLOGIES INC. and
LUCENT TECHNOLOGIES GUARDIAN I LLC,

Plaintiffs,

v.

BROADCOM CORP.

Defendant.

Case No.: 02-CV-3837

DEMAND FOR JURY TRIAL

COMPLAINT

Plaintiffs Lucent Technologies Inc. and Lucent Technologies Guardian I LLC (collectively, “Lucent”) for their Complaint against Broadcom Corp. (“Broadcom”) allege as follows:

Parties

1. Plaintiff Lucent Technologies Inc. is a corporation organized under the laws of the state of Delaware with its principal place of business at 600 Mountain Avenue, Murray Hill, New Jersey 07974.

2. Plaintiff Lucent Technologies Guardian I LLC is a limited liability company organized under the laws of the state of Delaware with its principal place of business at 600 Mountain Avenue, Murray Hill, New Jersey 07974.

3. On information and belief, Defendant Broadcom is a corporation organized under the laws of the State of California with its principal place of business at 16215 Alton Parkway, Irvine, California 92618. Broadcom maintains a sales office at 950 Wooded Pond Road, Ambler, Pennsylvania 19002.

4. On information and belief, Broadcom makes, uses, sells and/or offers for sale in the United States, and imports into the United States, semiconductor devices and software products used in analog modem applications.

Nature of the Action

5. This is a civil action for infringement of three United States Patents. This action is based upon the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

Jurisdiction and Venue

6. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331 and 1338(a).

7. Venue is proper in this district under 28 U.S.C. §§ 1391(b) and (c) and 1400(b) because Broadcom has committed acts of infringement in this district and because Broadcom is a corporation subject to personal jurisdiction in this district.

The Patents

8. United States Patent No. 4,520,490 (“the Wei ‘490 Patent”), entitled “Differentially Nonlinear Convolutional Channel Coding With Expanded Set Of Signalling Alphabets,” was duly and legally issued on May 28, 1985. The inventor named on the Wei ‘490 Patent is Lee-Fang Wei. A copy of the Wei ‘490 Patent is attached hereto as Exhibit A.

9. United States Patent No. 5,115,453 (“the Calderbank ‘453 Patent”), entitled “Technique For Designing A Multidimensional Signaling Scheme,” was duly and legally issued on May 19, 1992. The inventors named on the Calderbank ‘453 Patent are Arthur R. Calderbank and Lawrence H. Gzarow. A copy of the Calderbank ‘453 Patent is attached hereto as Exhibit B.

10. United States Patent No. 5,488,633 (“the Laroia ‘633 Patent”), entitled “Intersymbol Interference Channel Coding Scheme,” was duly and legally issued on January 30, 1996. The inventor named on the Laroia ‘633 Patent is Rajiv Laroia. A copy of the Laroia ‘633 Patent is attached hereto as Exhibit C.

11. The Wei ‘490, Calderbank ‘453, and Laroia ‘633 Patents are collectively referred to as the “Patents-in-Suit.”

12. Lucent is an owner of each of the Patents-in-Suit, and has the right to sue for past infringement.

Count I

(Infringement of United States Patent No. 4,520,490)

13. Paragraphs 1 through 12 are hereby incorporated by reference as if stated fully herein.

14. The Wei ‘490 Patent is valid and enforceable.

15. Broadcom has infringed and continues to infringe, directly, contributorily and/or by inducement, at least one claim of the Wei ‘490 Patent by making, using, selling,

offering to sell, and/or importing into the United States semiconductor devices and software products used in analog modem applications.

16. Although Lucent notified Broadcom of its infringement of the Wei '490 Patent, Broadcom continued its infringement after receiving this actual notice.

17. Broadcom's infringement of the Wei '490 Patent has been, and continues to be, willful.

18. Lucent has been damaged by Broadcom's infringement of the Wei '490 Patent and will suffer irreparable injury unless the infringement is enjoined by this Court.

Count II

(Infringement of United States Patent No. 5,115,453)

19. Paragraphs 1 through 18 are hereby incorporated by reference as if stated fully herein.

20. The Calderbank '453 Patent is valid and enforceable.

21. Broadcom has infringed and continues to infringe, directly, contributorily and/or by inducement, at least one claim of the Calderbank '453 Patent by making, using, selling, offering to sell, and/or importing into the United States semiconductor devices and software products used in analog modem applications.

22. Although Lucent notified Broadcom of its infringement of the Calderbank '453 Patent, Broadcom continued its infringement after receiving this actual notice.

23. Broadcom's infringement of the Calderbank '453 Patent has been, and continues to be, willful.

24. Lucent has been damaged by Broadcom's infringement of the Calderbank '453 Patent and will suffer irreparable injury unless the infringement is enjoined by this Court.

Count III

(Infringement of United States Patent No. 5,488,633)

25. Paragraphs 1 through 24 are hereby incorporated by reference as if stated fully herein.

26. The Laroia '633 Patent is valid and enforceable.

27. Broadcom has infringed and continues to infringe, directly, contributorily and/or by inducement, at least one claim of the Laroia '633 Patent by making, using, selling, offering to sell, and/or importing into the United States semiconductor devices and software products used in analog modem applications.

28. Although Lucent notified Broadcom of its infringement of the Laroia '633 Patent, Broadcom continued its infringement after receiving this actual notice.

29. Broadcom's infringement of the Laroia '633 Patent has been, and continues to be, willful.

30. Lucent has been damaged by Broadcom's infringement of the Laroia '633 Patent and will suffer irreparable injury unless the infringement is enjoined by this Court.

Prayer for Relief

WHEREFORE, Lucent prays for judgment as follows:

A. That Broadcom has willfully infringed the Patents-in-Suit;

- B. That Broadcom, its officers, agents, servants and employees, and those persons in active concert or participation with any of them, and their successors and assigns be permanently enjoined from infringement, inducement of infringement, and contributory infringement of each of the Patents-in-Suit, including but not limited to making, importing, using, offering for sale, or selling any devices or systems that infringe, or using processes that infringe, the Patents-in-Suit prior to the expiration dates of those patents;
- C. That Lucent be awarded all damages adequate to compensate it for Broadcom's infringement of the Patents-in-Suit, such damages to be determined by a jury and, if necessary to adequately compensate Lucent for the infringement, an accounting, and that such damages be trebled and awarded to Lucent along with prejudgment interest;
- D. That this case be declared an exceptional case within the meaning of 35 U.S.C. § 285 and that Lucent be awarded the attorney fees, costs, and expenses that it incurs in prosecuting this action; and
- E. That Lucent be awarded such other and further relief as this Court deems just and proper.

JURY DEMAND

Lucent demands a trial by jury on all issues triable of right by a jury.

Date: June 18, 2002

Respectfully submitted,

Paul Kennedy
PEPPER HAMILTON LLP
3000 Two Logan Square
Eighteenth and Arch Streets
Philadelphia, Pennsylvania 19103-2799
Telephone: 215-981-4194
Facsimile: 215-981-4750

Attorney for Plaintiffs Lucent Technologies
Inc. and Lucent Guardian I LLC

OF COUNSEL:

John M. Desmarais
Michael P. Stadnick
KIRKLAND & ELLIS
153 East 53rd Street
New York, New York 10022-4675
Tel: (202) 446-4800